TABLE 160.050–2(B)—SIZES AND DIMENSIONS OF RING LIFE BUOYS

Size	Dimensions (inches) Finished ring
30-inch	30
24-inch	24
20-inch	20

[CGFR 54–46, 19 FR 8707, Dec. 18, 1954, as amended by CGFR 62–17, 27 FR 9045, Sept. 11, 1962]

§ 160.050–3 Materials.

(a) *General.* All exposed materials must be resistant to oil or oil products, salt water and anticipated weather conditions encountered at sea. All components used in construction of buoys and life rings must meet the applicable requirements of subpart 164.019 of this chapter.

(b) *Unicellular plastic.* The unicellular plastic material used in fabrication of the buoy body shall meet the requirements of subpart 164.015 of this subchapter for Type C material. The buoy's body shall be finished with two coats of vinyl base paint. The ring life buoys shall be either international orange (Color No. 12197 of Federal Standard 595) or white in color and the colorfastness shall be rated ''good'' when tested in accordance with Federal Test Method Standard No. 191 Methods 5610, 5630, 5650, and 5660.

NOTE: On vessels on an international voyage, all ring life buoys shall be international orange in color.)

(c) *Grab line.* The grab line shall be ⅜-inch diameter polyethylene, polypropylene, or other suitable buoyant type synthetic material having a minimum breaking strength of 1,350 pounds.

(d) *Beckets.* The beckets for securing the grab line shall be 2-inch polyethylene, polypropylene, nylon, saran or other suitable synthetic material having a minimum breaking strength of 585 pounds. In addition, polyethylene and polypropylene shall be weather-resistant type which is stabilized as to heat, oxidation, and ultraviolet light degradation.

(e) *Thread.* Each thread must meet the requirements of subpart 164.023 of this chapter. Only one kind of thread may be used in each seam.

[CGFR 65–9, 30 FR 11477, Sept. 8, 1965, as amended by CGFR 65–64, 31 FR 562, Jan. 18, 1966; CGD 78–012, 43 FR 27154, June 22, 1978; CGD 84–068, 58 FR 29493, May 20, 1993]

§ 160.050–4 Construction and workmanship.

(a) *General.* This specification covers ring life buoys which provide buoyancy to aid in keeping persons afloat in the water. Each buoy consists of a body constructed in the shape of an annular ring, with an approximately elliptical body cross section and which is fitted with a grab line around the outside periphery. The outside and inside diameters of the ring and the length and width of the cross section of the body shall be uniform throughout.

(b) *Body.* The body shall be made in either one or two pieces. If of two pieces, the pieces shall be equal in size and shall be adhesive bonded along a center line through an axis passing through the flat area dimension of the body. The adhesive shall be a liquid cold setting, polymerizable, nonsolvent, containing material of the phenolepichlorhydrin type or equivalent having good strength retention under outdoor weathering conditions.

(c) *Grab line.* The finished length of the grab line shall be four times the outside diameter of the buoy. The ends of the grab line shall be securely and neatly spliced together, or shall be hand whipped with a needle and both ends securely and smoothly seized together. The grab line shall encircle the buoy and shall be held in place by the beckets. The spliced or seized ends of the grab line shall be placed in the center of the width of one of the beckets.

(d) *Beckets.* Each ring buoy shall be fitted with four beckets located at equidistant points about the body of the buoy. The beckets shall be passed around the body of the buoy with the free ends to the outside, and shall be securely cemented to the buoy with a suitable waterproof adhesive which is compatible with the unicellular plastic used in the buoy body. The ends of the beckets shall be turned under at least 1 inch, one end to go around the grab line, and the other to be laid flat against the first end. The beckets shall

then be stitched to the grab line with not less than five hand stitches made with two parts of thread or machined stitched with not less than three stitches per inch. Alternate methods for rigging beckets and grab line will be given special consideration.

(e) *Weight.* The weight of the completely assembled buoy shall be not less than 2.5 pounds and not more than 4.25 pounds for the 20-inch size, not less than 3.0 pounds and not more than 5.5 pounds for the 24-inch size, and not less than 5.0 and not more than 7.5 pounds for the 30-inch size.

(f) *Workmanship.* Ring life buoys shall be of first class workmanship and free from any defects materially affecting their appearance or serviceability.

[CGFR 54–46, 19 FR 8707, Dec. 18, 1954, as amended by CGFR 62–17, 27 FR 9045, Sept. 11, 1962; CGFR 65–9, 30 FR 11477, Sept. 8, 1965]

§ 160.050–5 Sampling, tests, and inspection.

(a) *General.* Production tests and inspections must be conducted in accordance with this section, subpart 159.007 of this chapter, and if conducted by an independent laboratory, the independent laboratory's procedures for production inspections and tests as accepted by the Commandant. The Commandant may prescribe additional production tests and inspections necessary to maintain quality control and to monitor compliance with the requirements of this subchapter.

(b) *Oversight.* In addition to responsibilities set out in part 159 of this chapter and the accepted laboratory procedures for production inspections and tests, each manufacturer of a ring life buoy and each laboratory inspector shall comply with the following, as applicable:

(1) *Manufacturer.* Each manufacturer must—

(i) Perform all tests and examinations necessary to show compliance with this subpart and the subpart under which the ring life buoy is approved on each lot before any inspector's tests and inspection of the lot;

(ii) Follow established procedures for maintaining quality control of the materials used, manufacturing operations, and the finished product; and

(iii) Allow an inspector to take samples of completed units or of component materials for tests required by this subpart and for tests relating to the safety of the design.

(iv) Meet 33 CFR 181.701 through 33 CFR 181.705 which requires an instruction pamphlet for each device that is sold or offered for sale for use on recreational boats, and must make the pamphlet accessible prior to purchase.

(2) *Laboratory.* An inspector from the accepted laboratory shall oversee production in accordance with the laboratory's procedures for production inspections and tests accepted by the Commandant. During production oversight, the inspector shall not perform or supervise any production test or inspection unless—

(i) The manufacturer has a valid approval certificate; and

(ii) The inspector has first observed the manufacturer's production methods and any revisions to those methods.

(3) At least quarterly, the inspector shall check the manufacturer's compliance with the company's quality control procedures, examine the manufacturer's required records, and observe the manufacturer perform each of the required production tests.

(c) *Test facilities.* The manufacturer shall provide a suitable place and apparatus for conducting the tests and inspections necessary to determine compliance of ring life buoys with this subpart. The manufacturer shall provide means to secure any test that is not continuously observed, such as the 48 hour buoyancy test. The manufacturer must have the calibration of all test equipment checked in accordance with the test equipment manufacturer's recommendation and interval but not less than at least once every year.

(d) *Lots.* A lot may not consist of more than 1000 life buoys. A lot number must be assigned to each group of life buoys produced. Lots must be numbered serially. A new lot must be started whenever any change in materials or a revision to a production method is made, and whenever any substantial discontinuity in the production process occurs. The lot number assigned, along with the approval number, must enable